



Basic principles

± 10 degrees

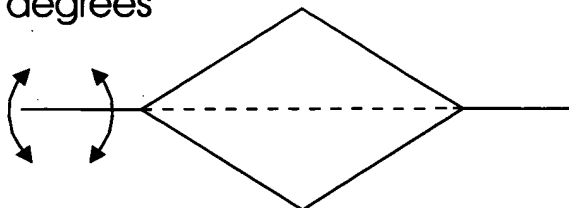


Fig. 1

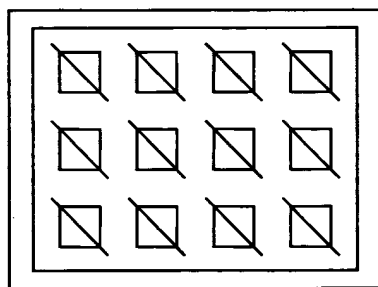


Fig. 2

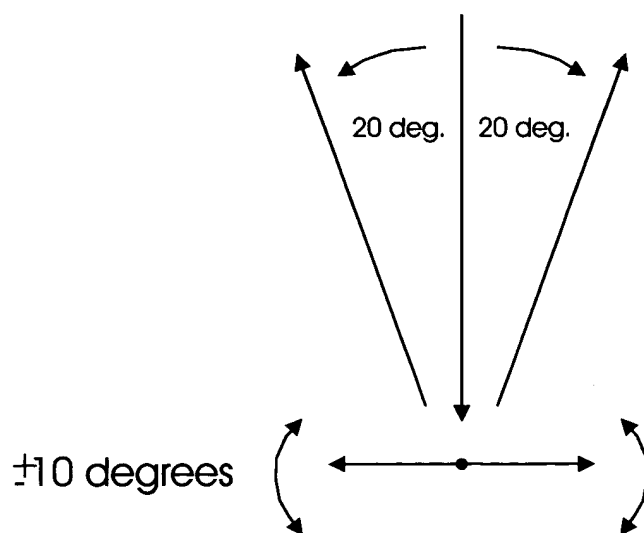
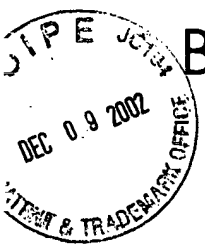


Fig. 3



Basic principles

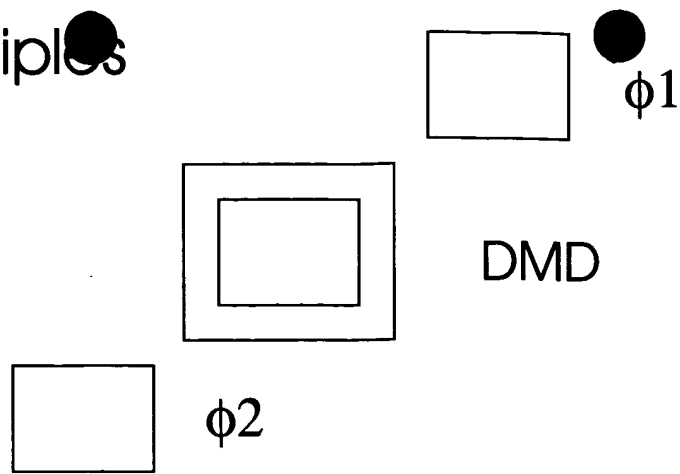


Fig. 4

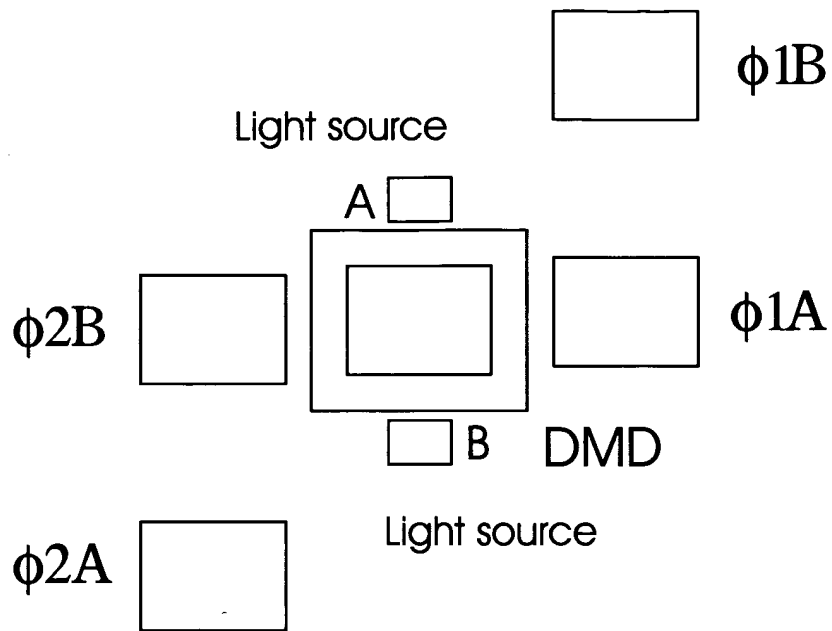


Fig. 5

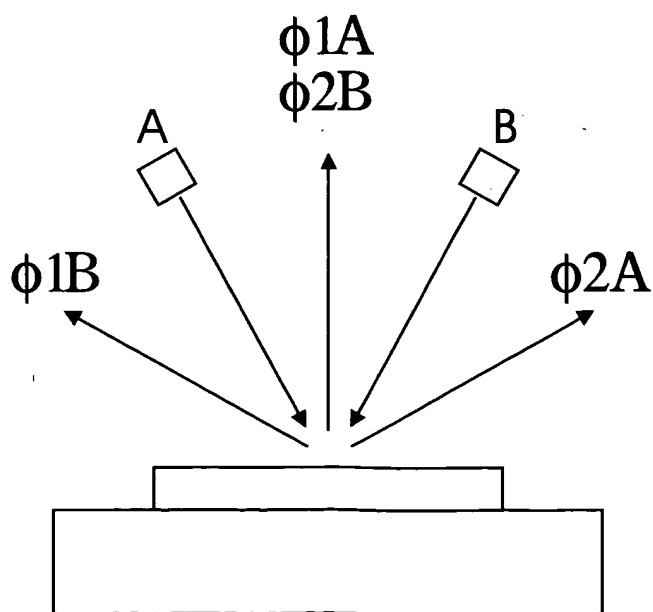


Fig. 6

Mirror HMD - Single Stage

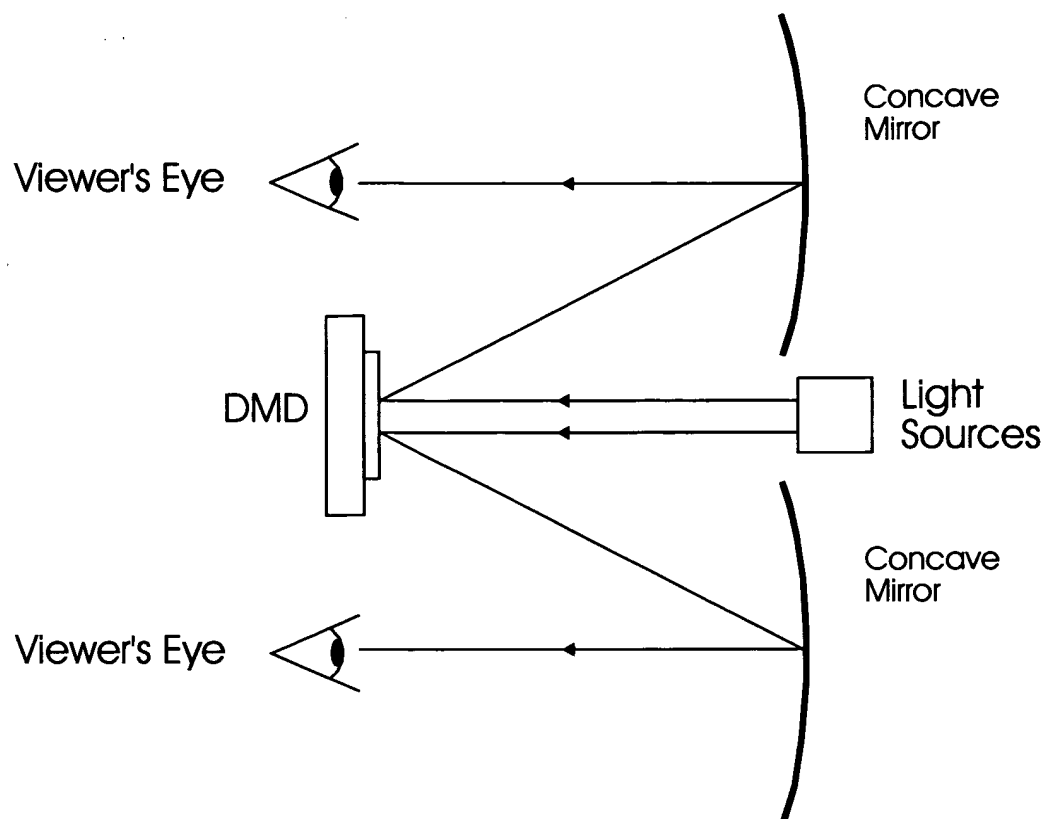


Fig. 7

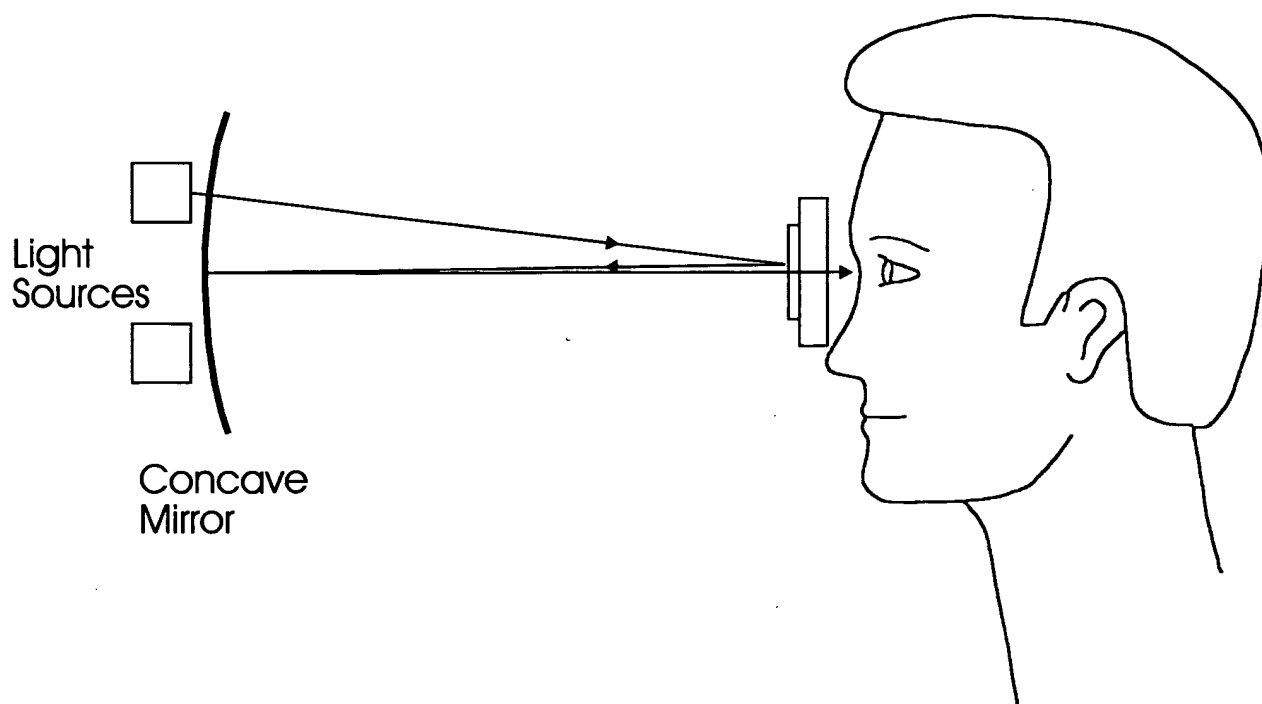


Fig. 8



Mirror HMD - Two Stage

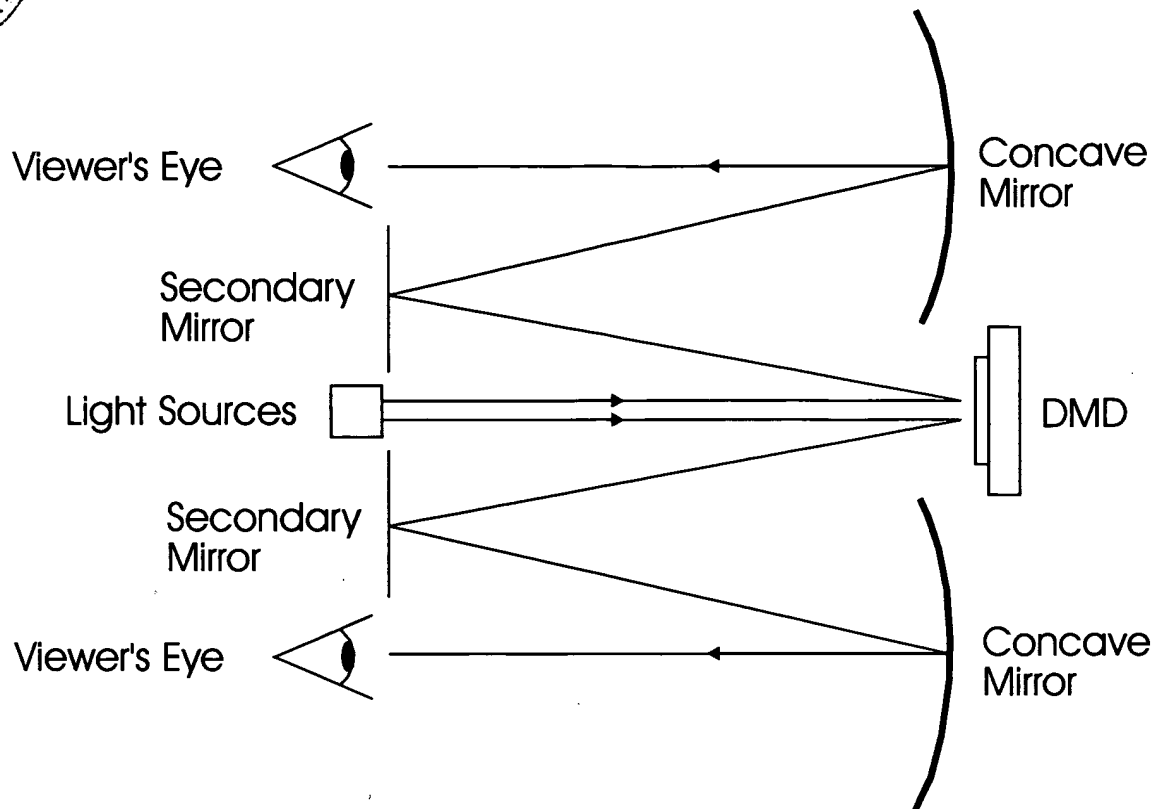


Fig. 9

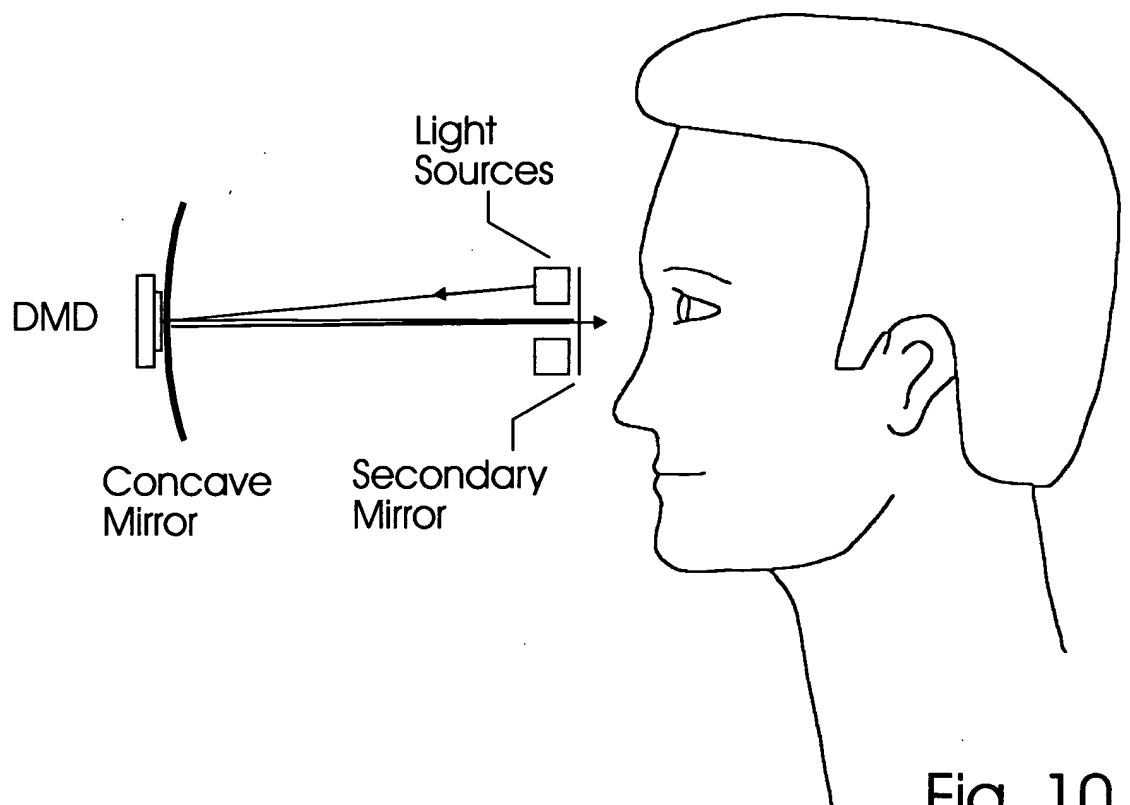


Fig. 10

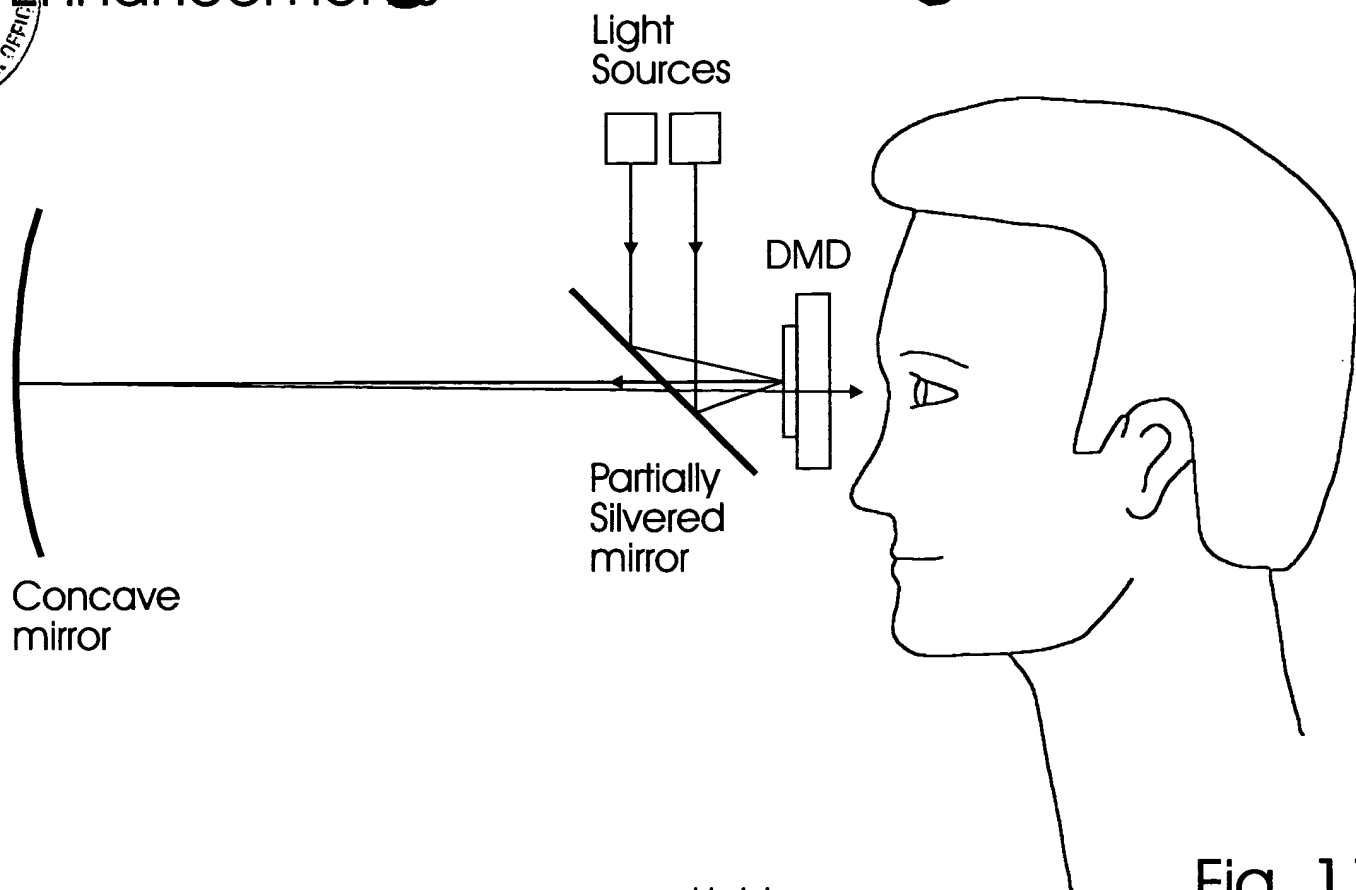


Fig. 11

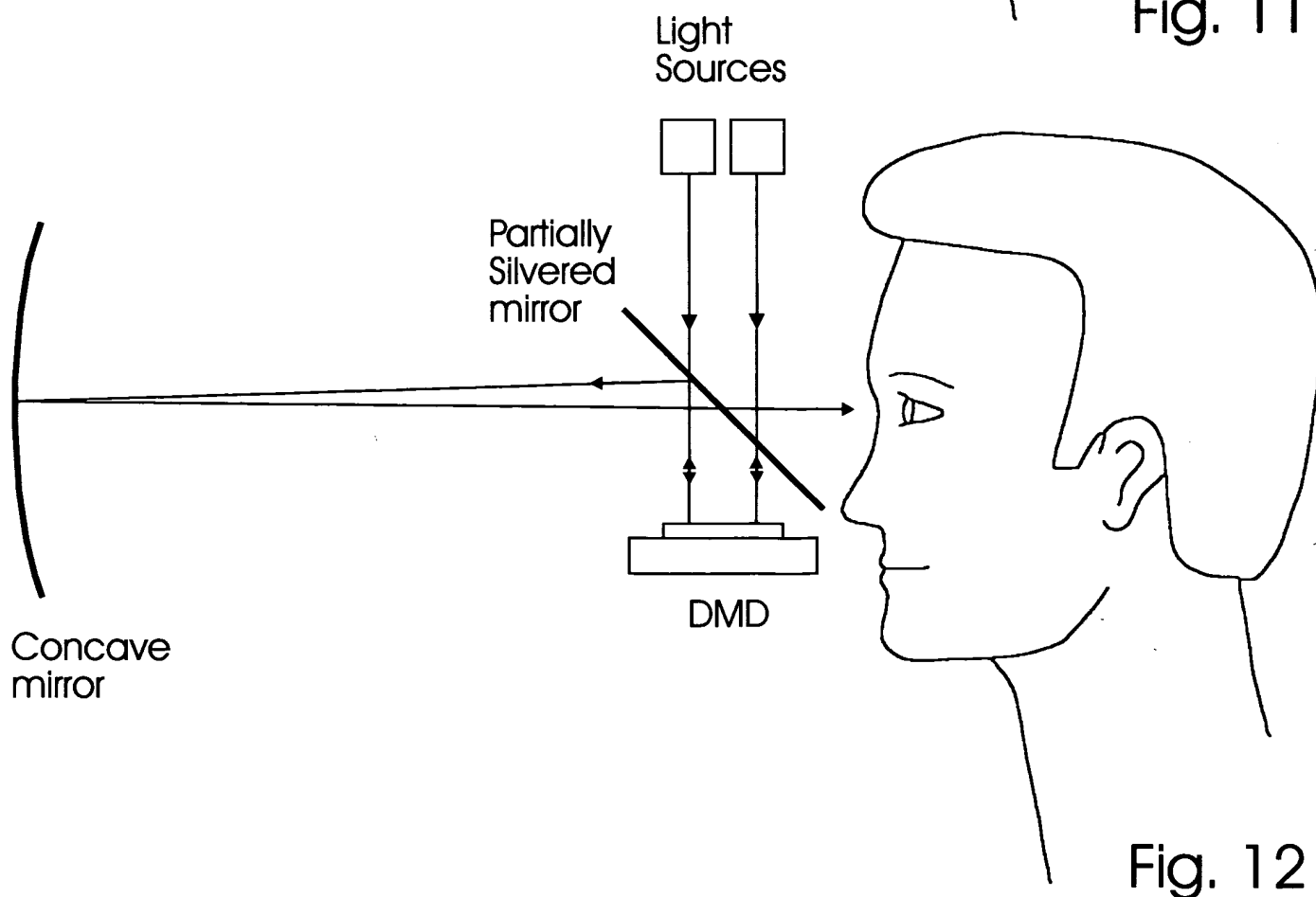


Fig. 12

Enhancements

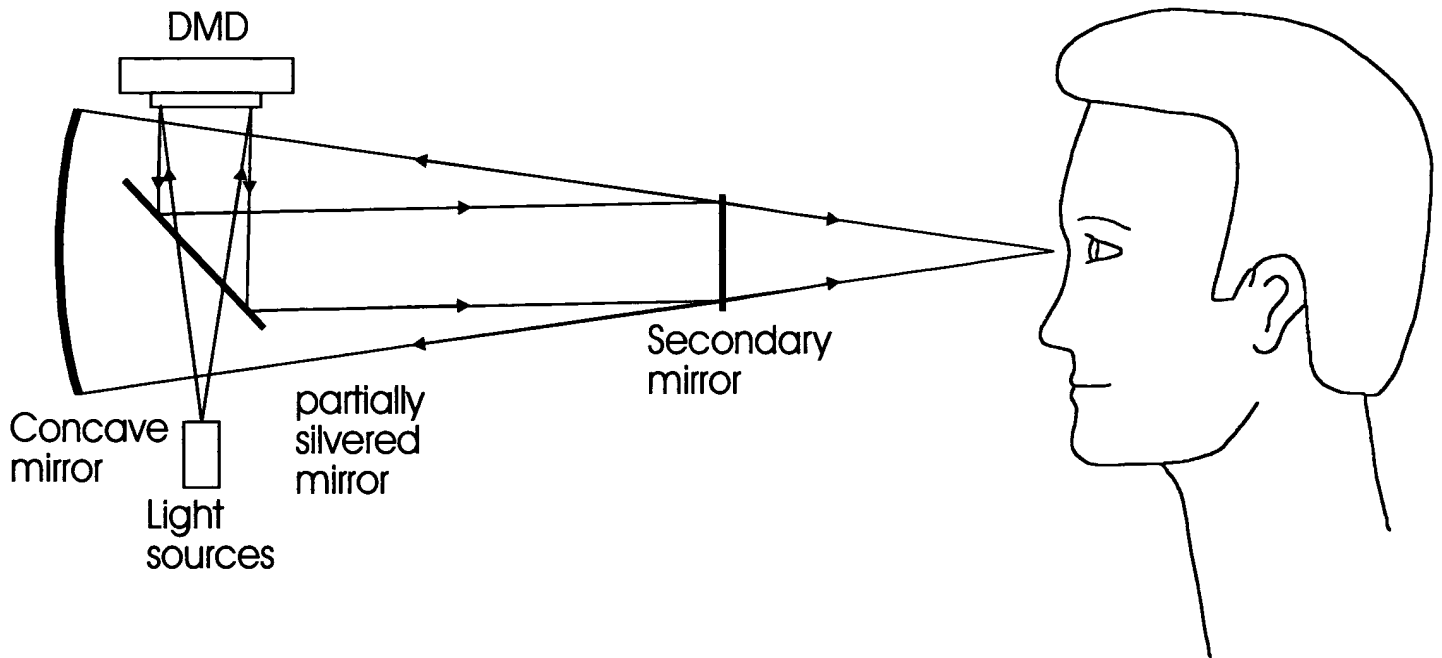


Fig. 13

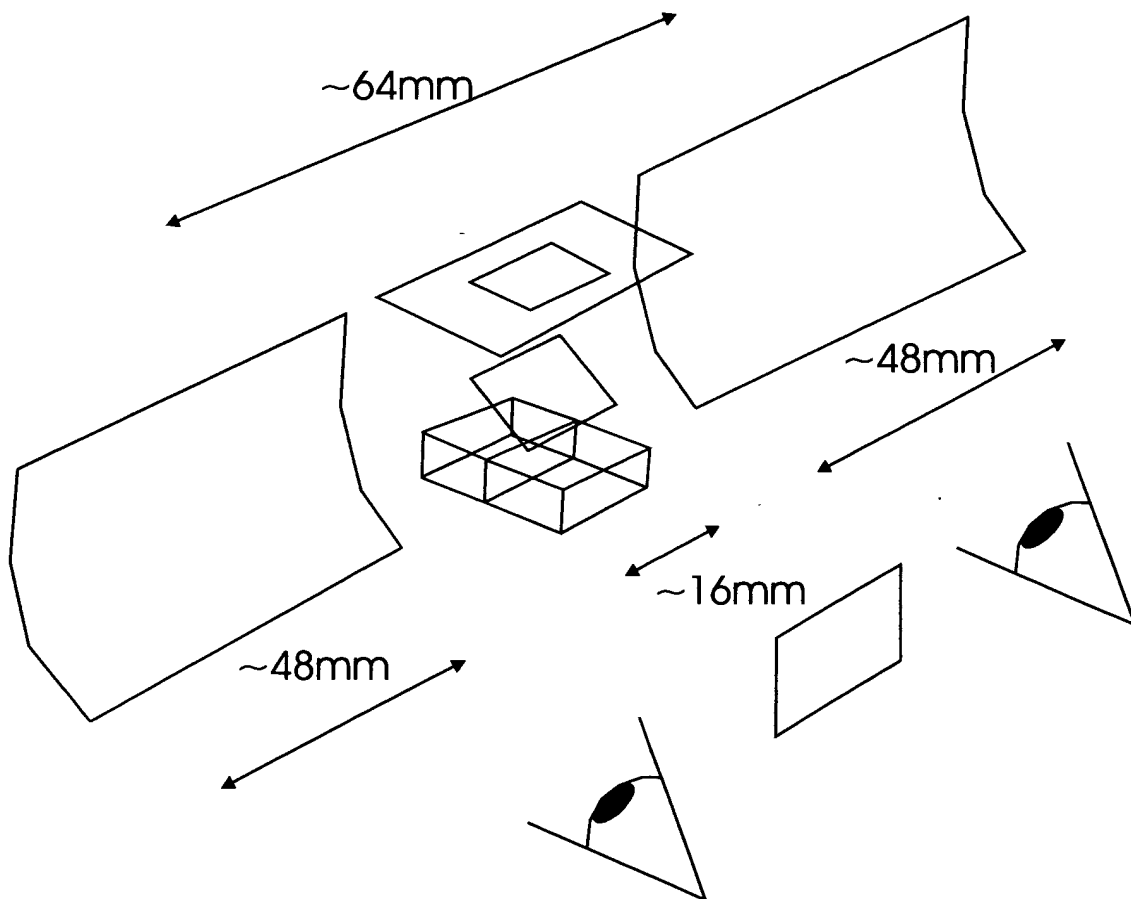


Fig. 14



DEC 0 9 2002

Dual DMD lens system

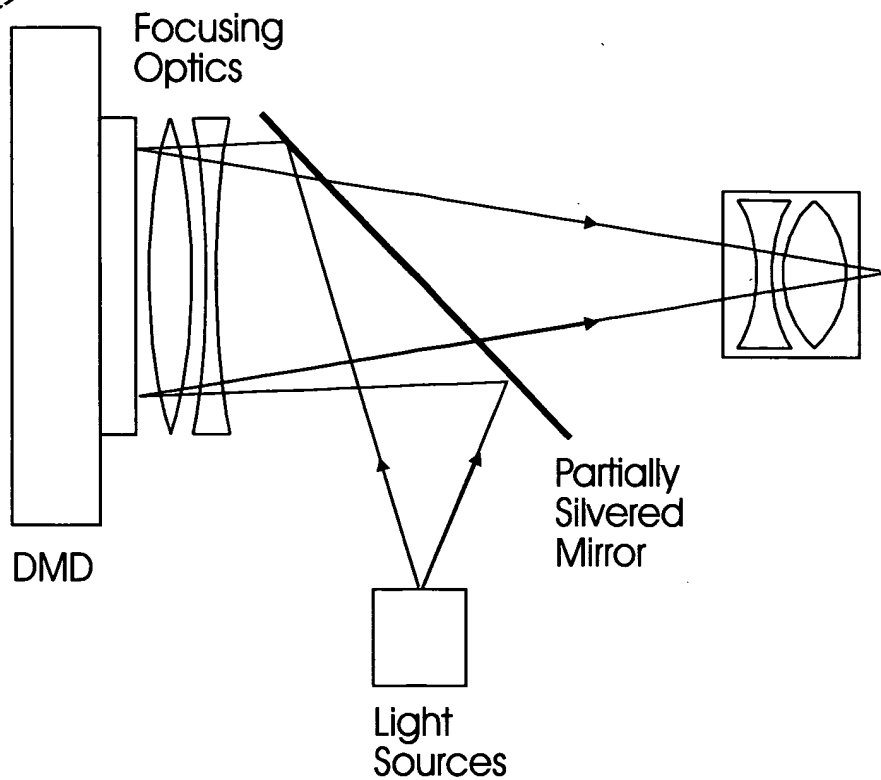


Fig. 15

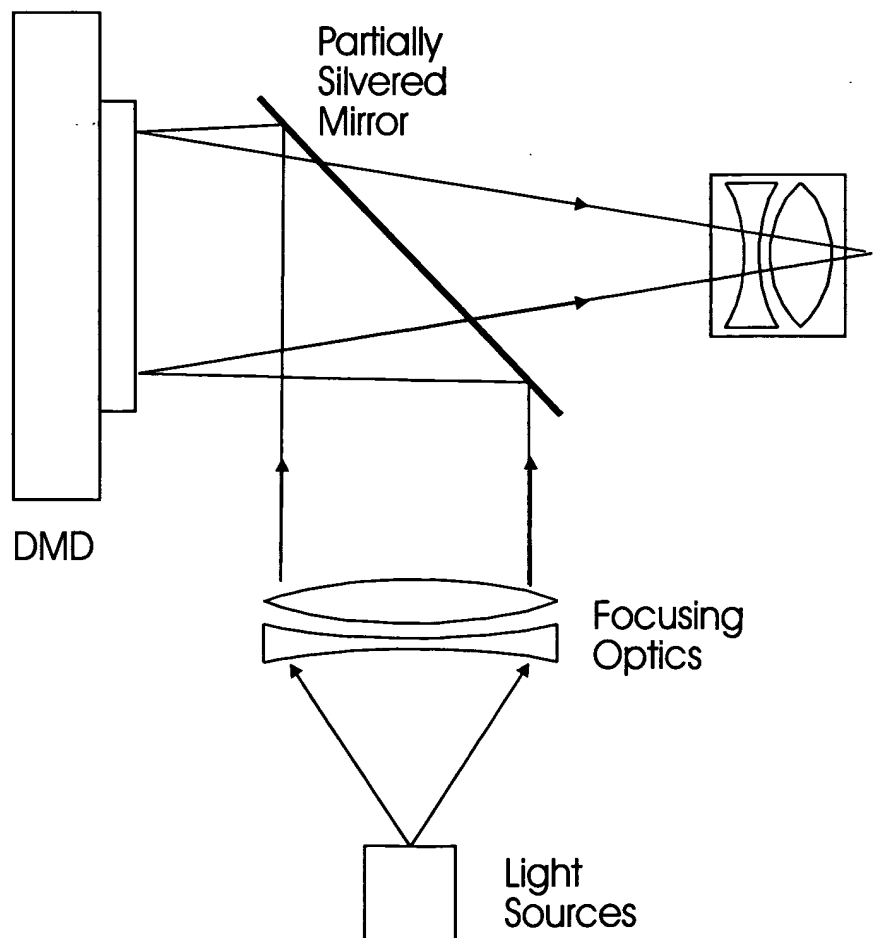


Fig. 16



2 stage dual mirror hybrid HMD

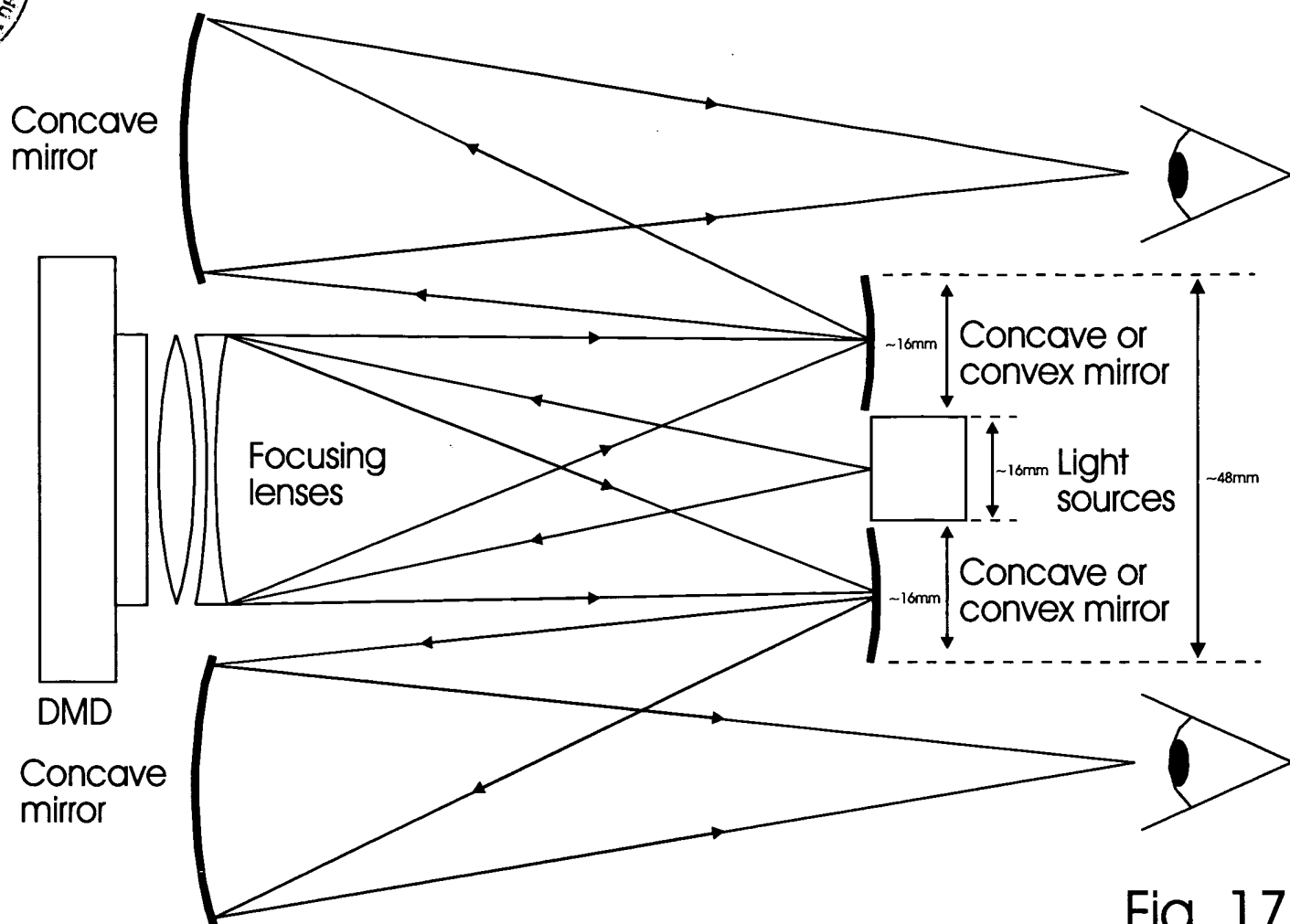


Fig. 17

Single DMD lens HMD

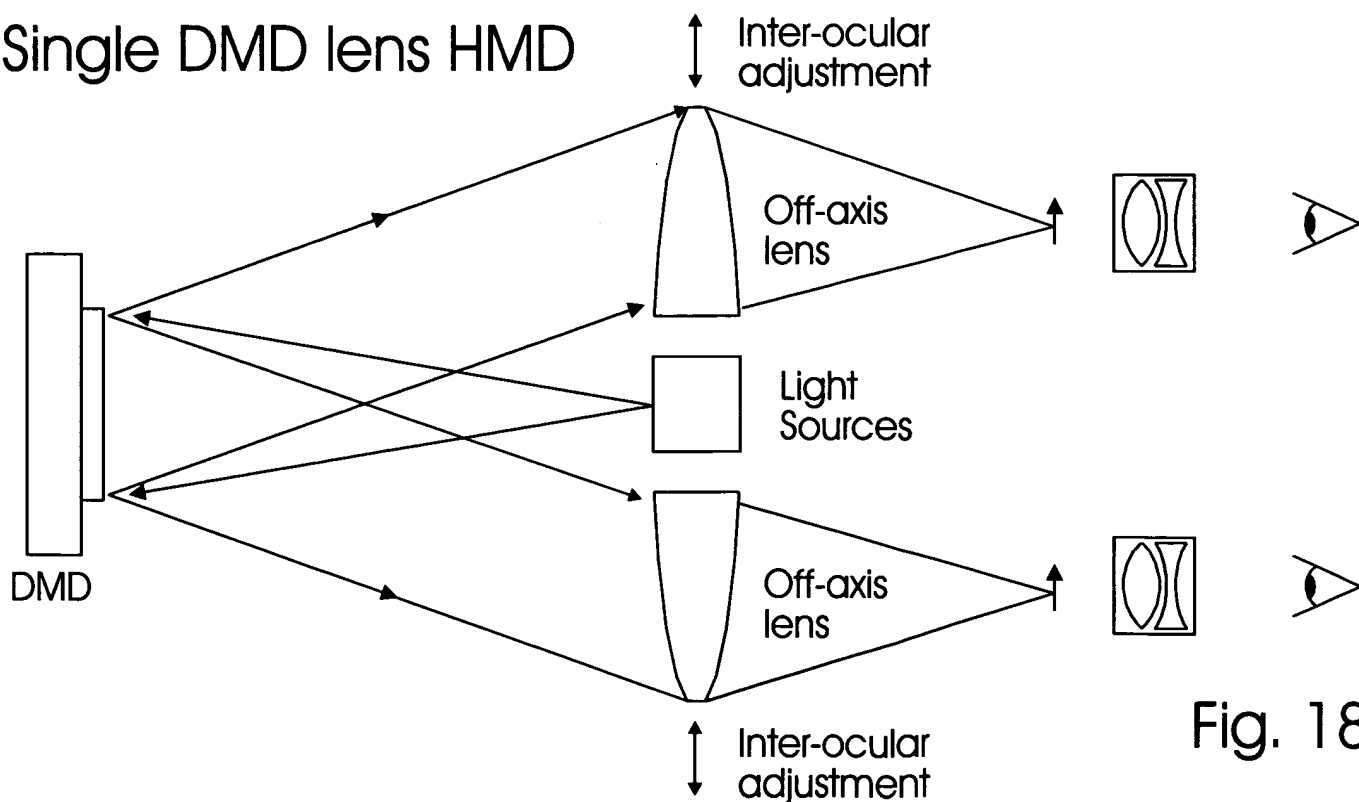


Fig. 18

Prismatic lens design

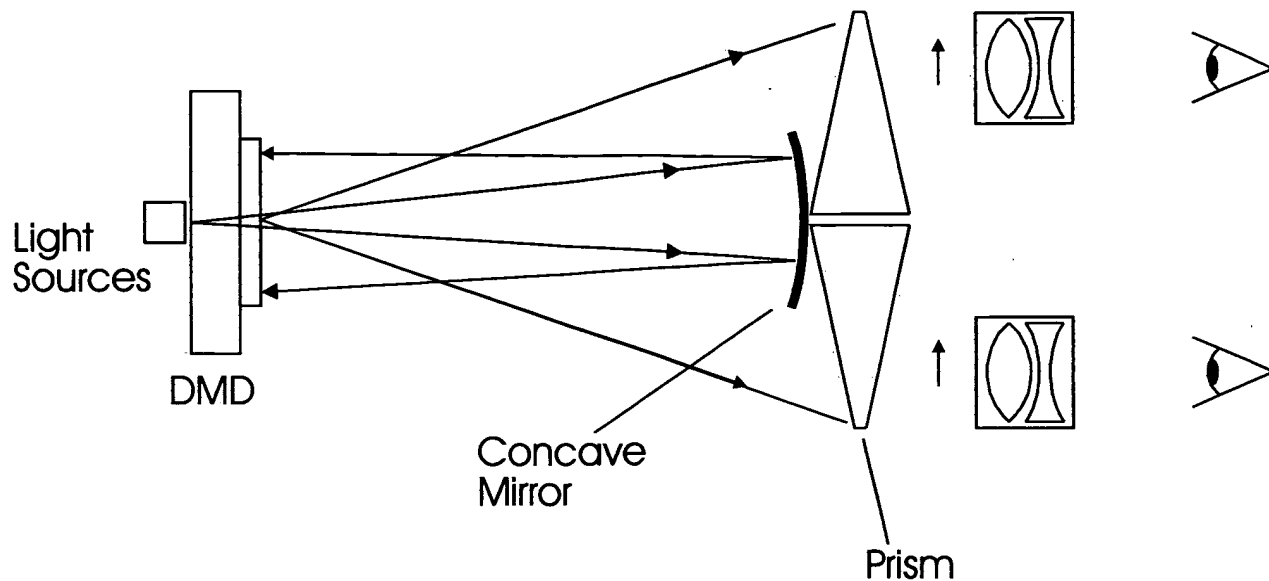


Fig. 19

Binocular lens design

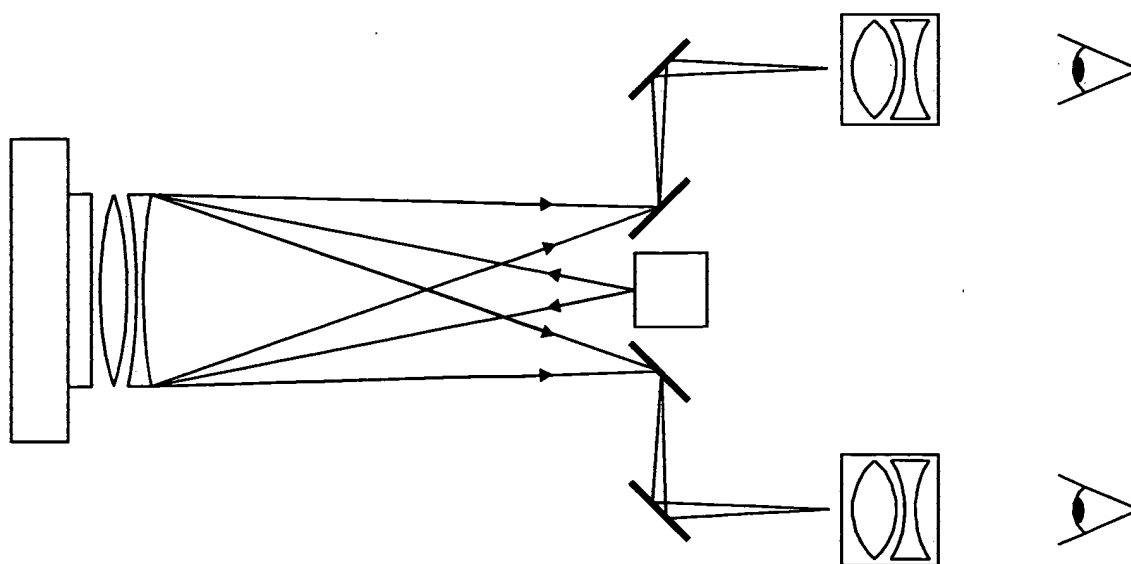


Fig. 20



Single stage hybrid lens system

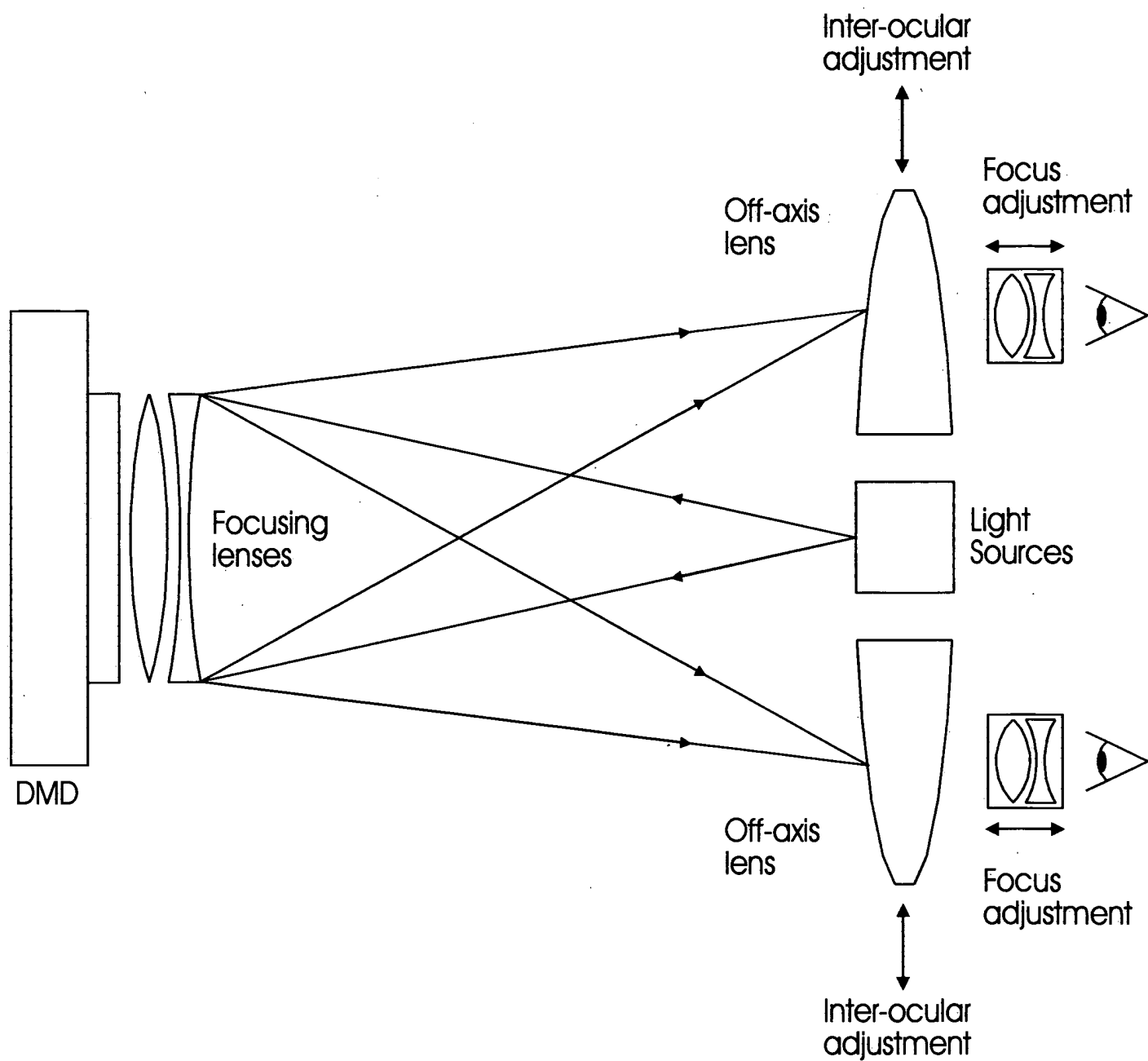


Fig. 21

2 stage hybrid lens system (preferred embodiment)

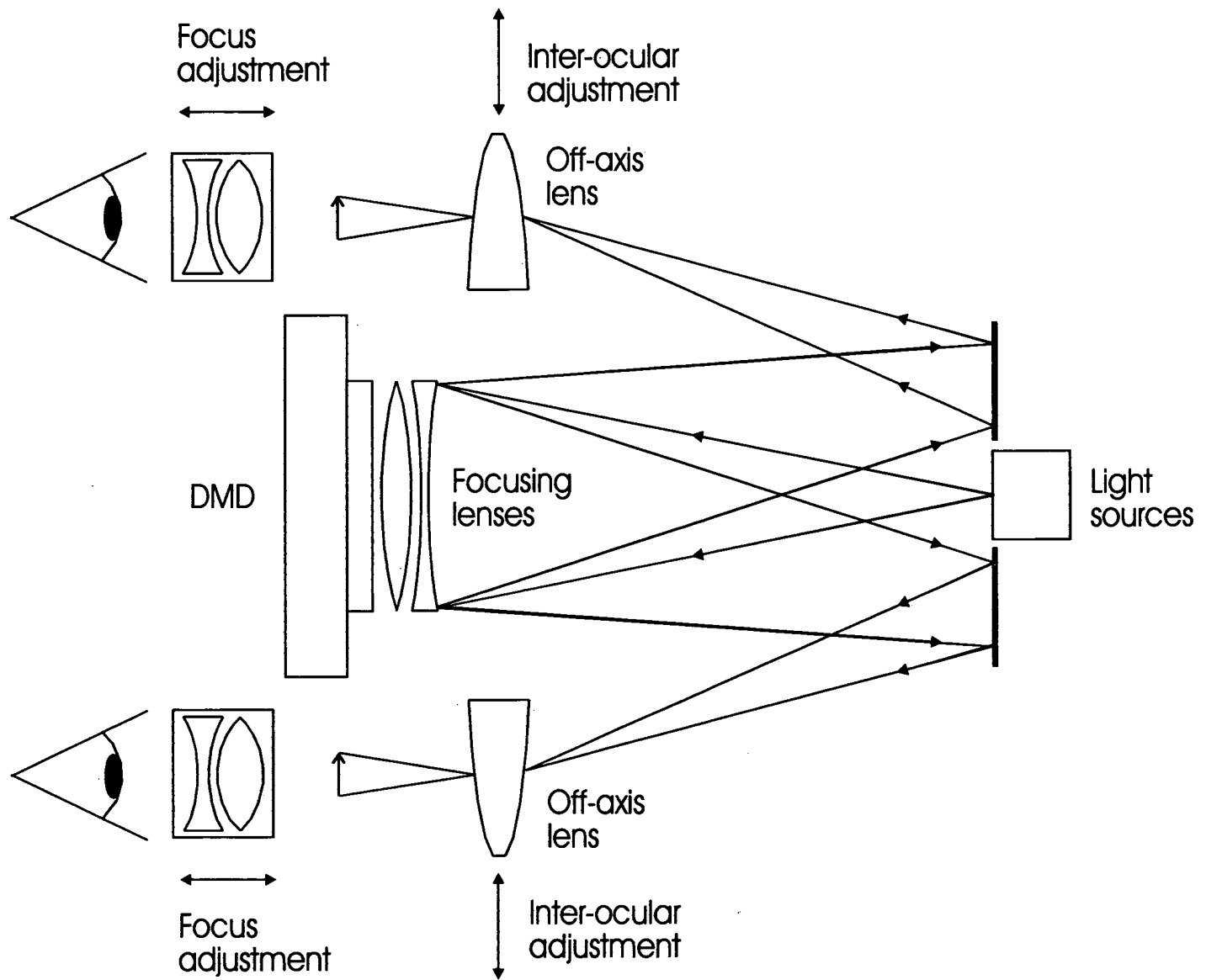


Fig. 22

DEC 09 2002
PATENT & TRADEMARKS

Lens HMD enhancements

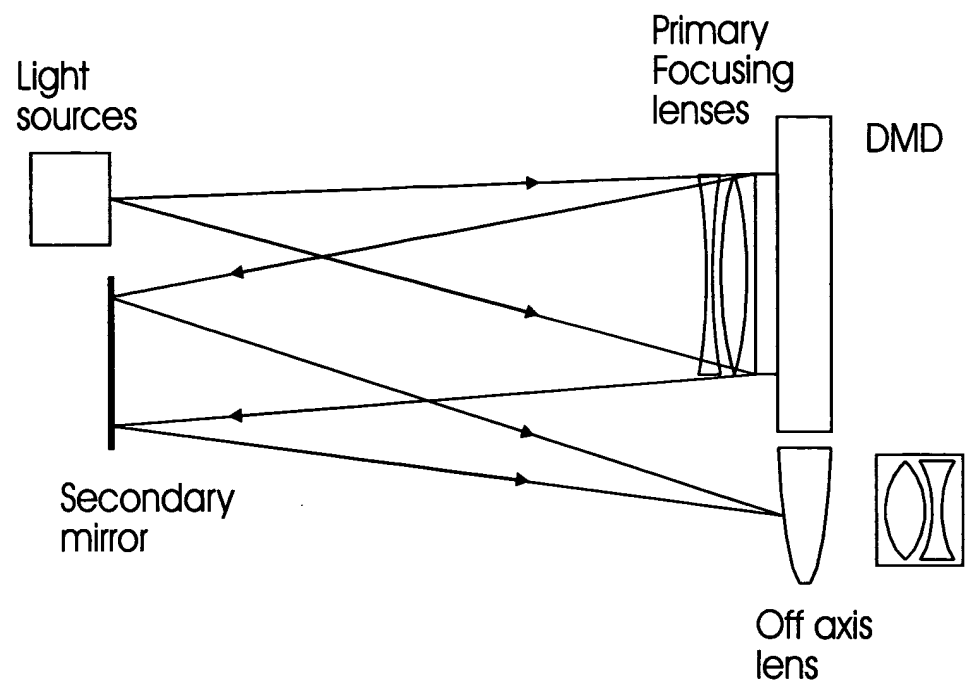


Fig. 23

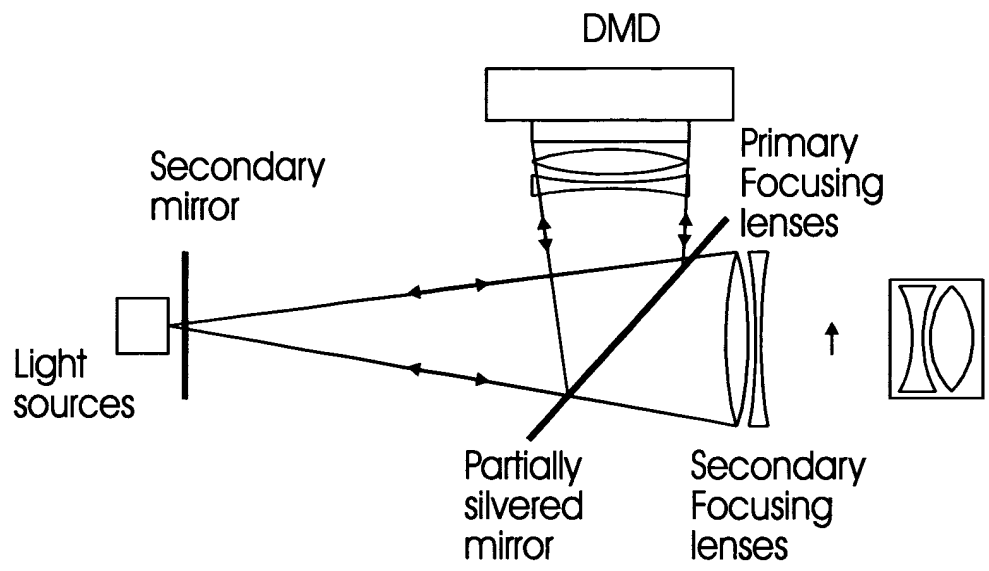


Fig. 24

Light sources

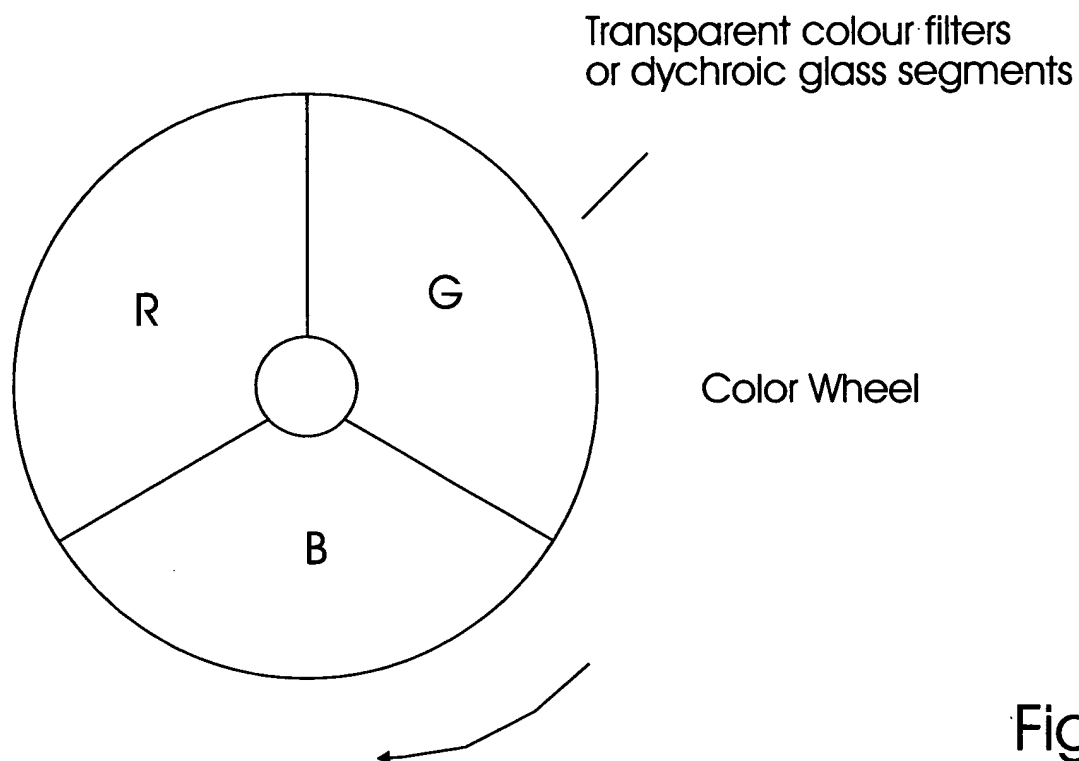


Fig. 25

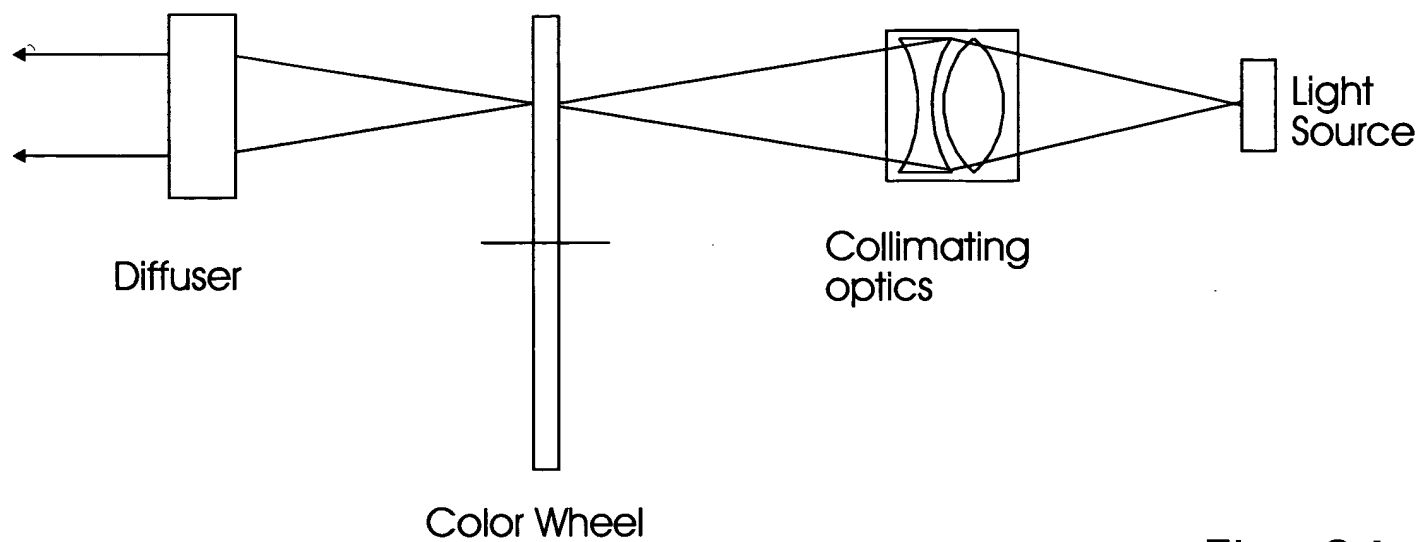


Fig. 26



Light sources ●

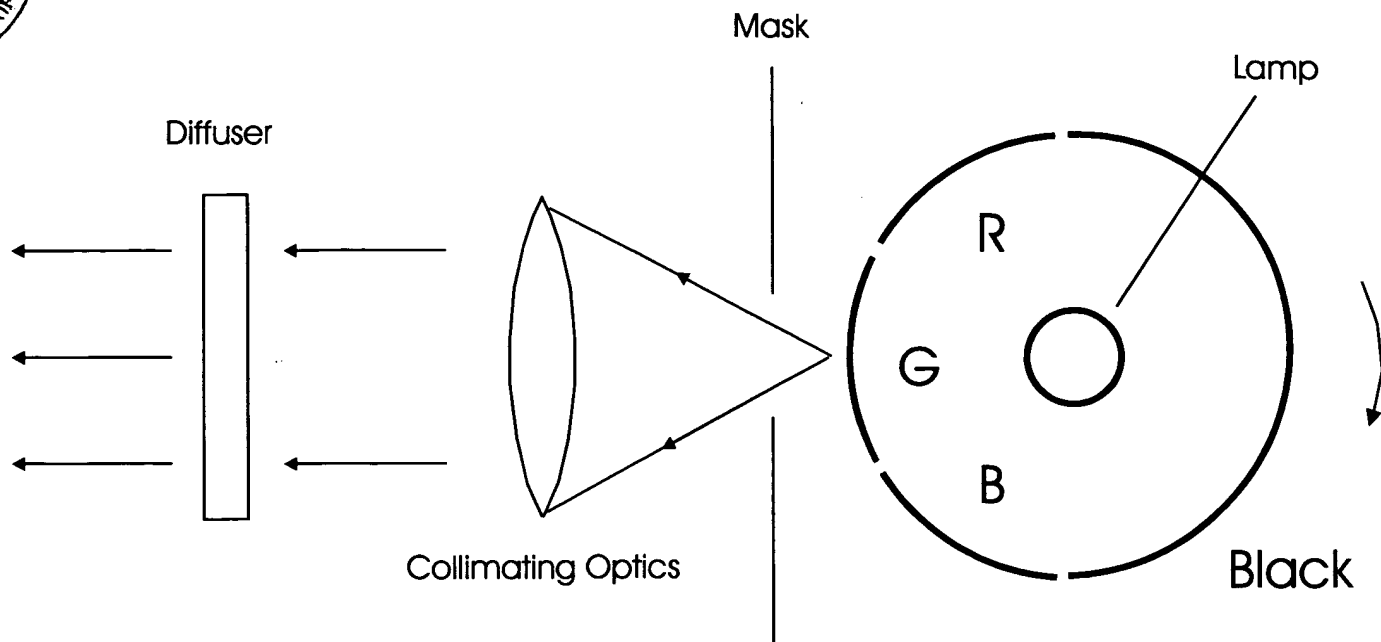


Fig. 27

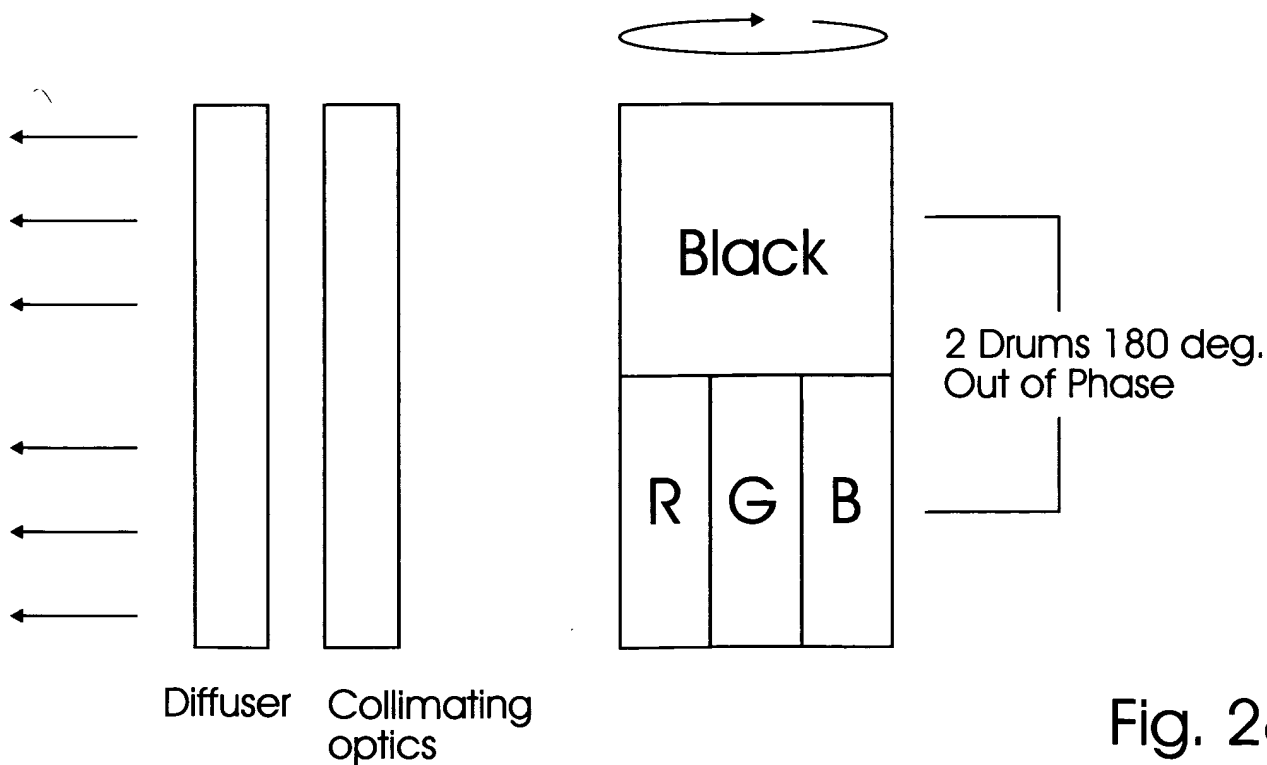
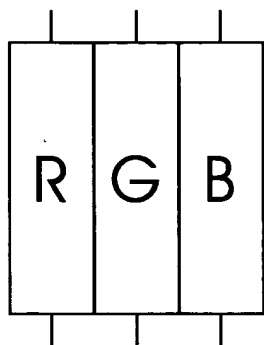


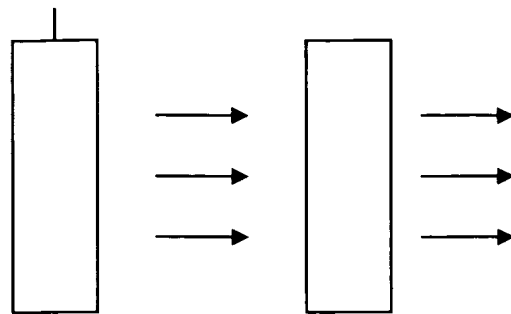
Fig. 28

Light sources



Light
sources

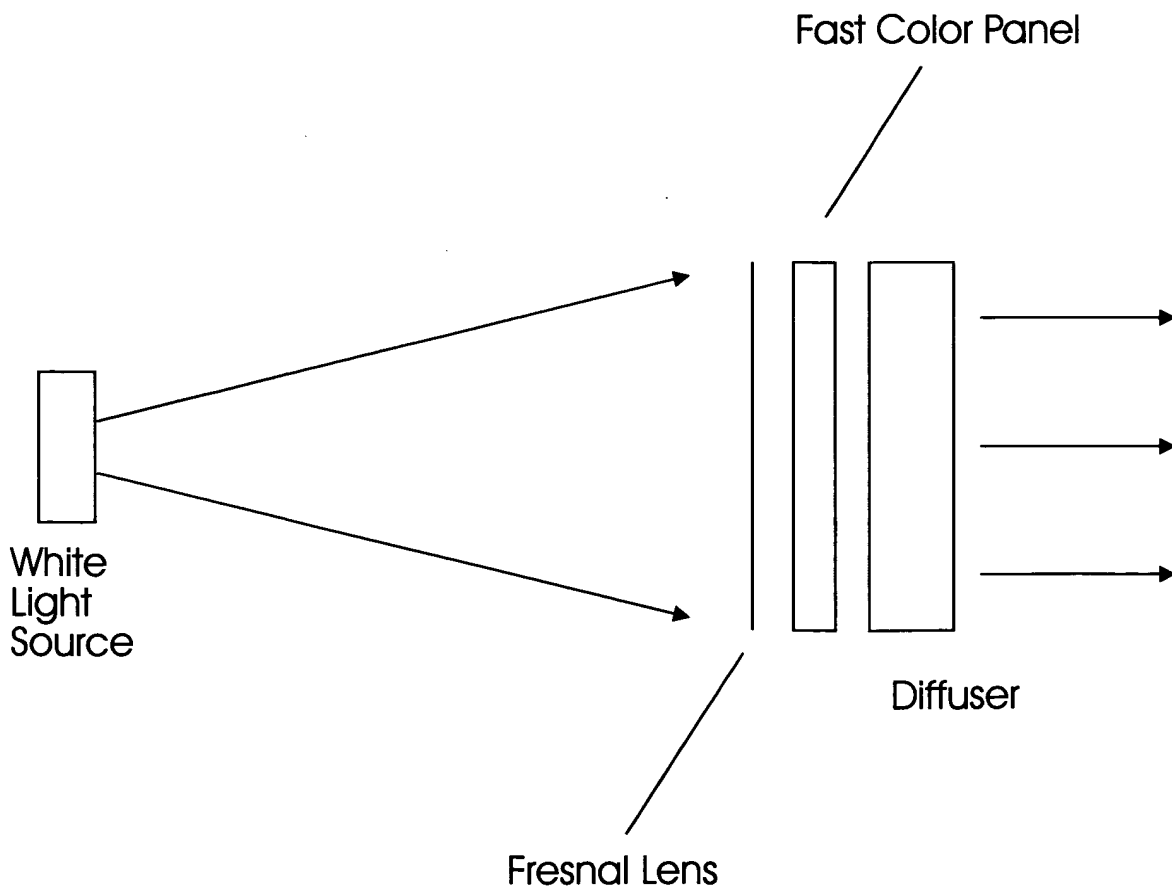
Fig. 29 A



Light
sources

Diffuser

Fig. 29 B



White
Light
Source

Fast Color Panel

Diffuser

Fresnel Lens

Fig. 30



Light sources ●

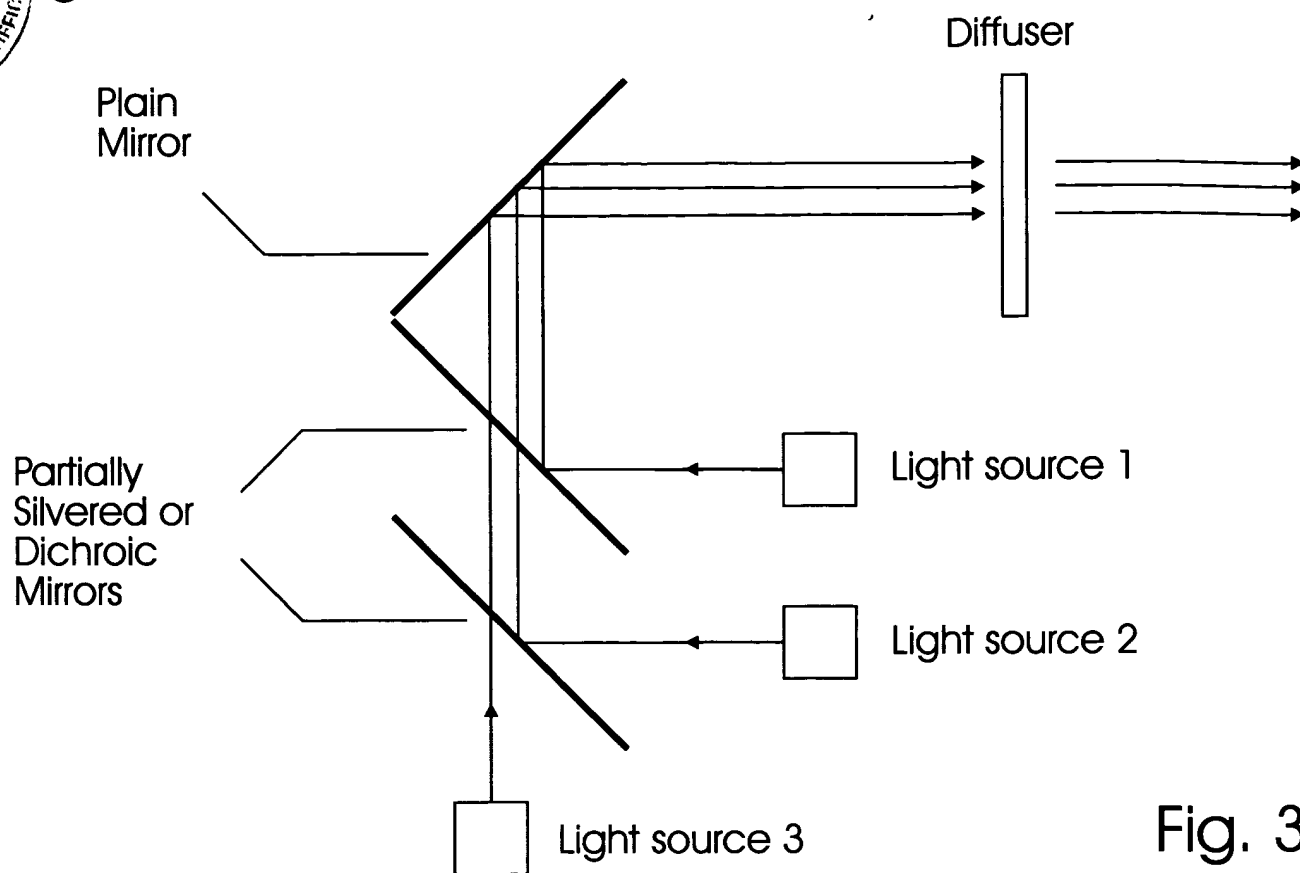


Fig. 31

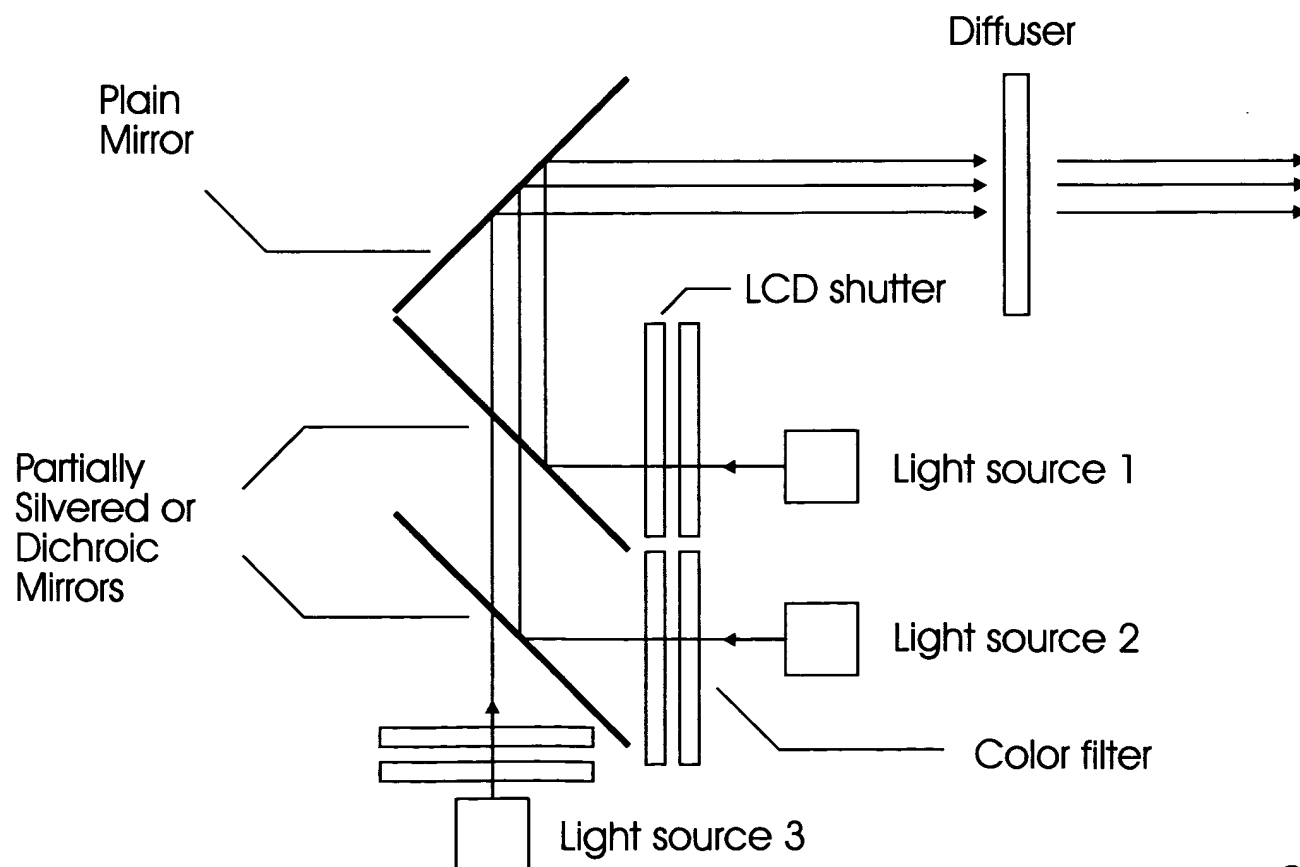


Fig. 32

LED Array-1 (Monochrome LEDs)

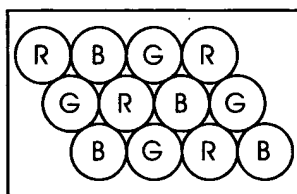
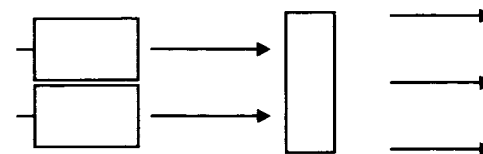


Fig. 33 A



LED array Diffuser

Fig. 33 B

R,G,B LED Array - 2

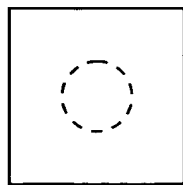
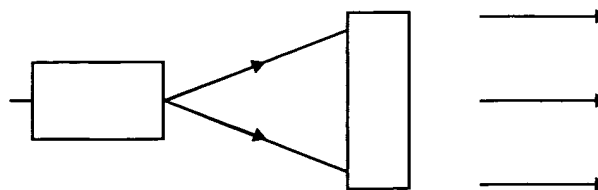


Fig. 34 A



R,G,B
LED

Diffuser

Fig. 34 B

Optical enhancements

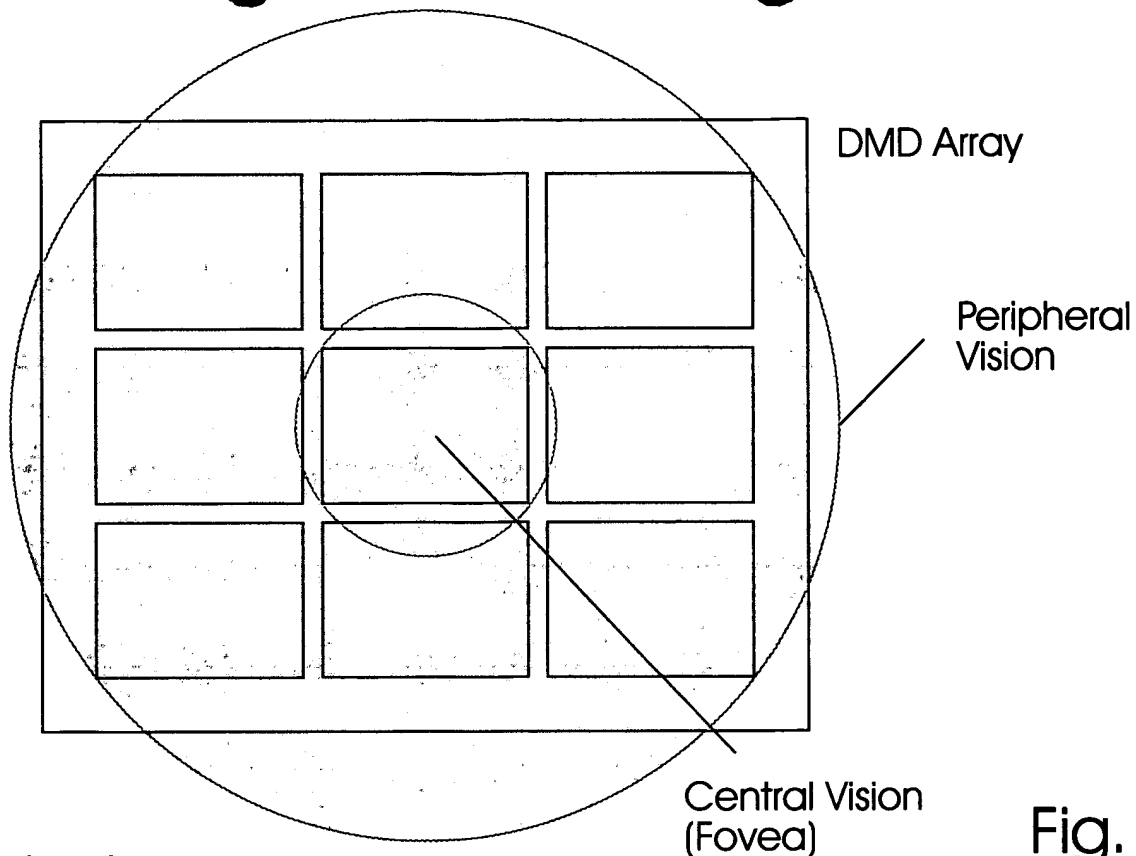


Fig. 35

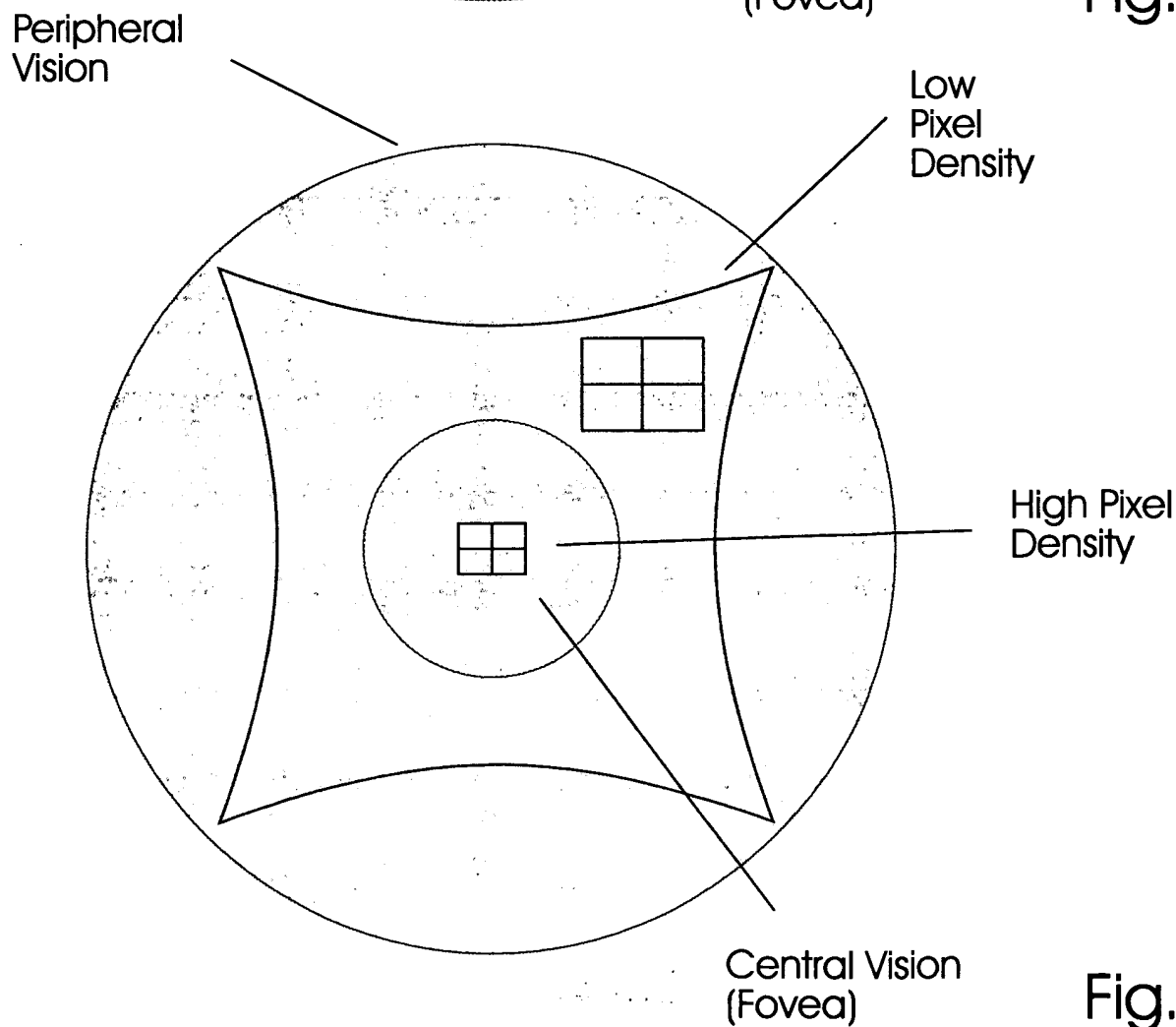


Fig. 36



Color space comparison

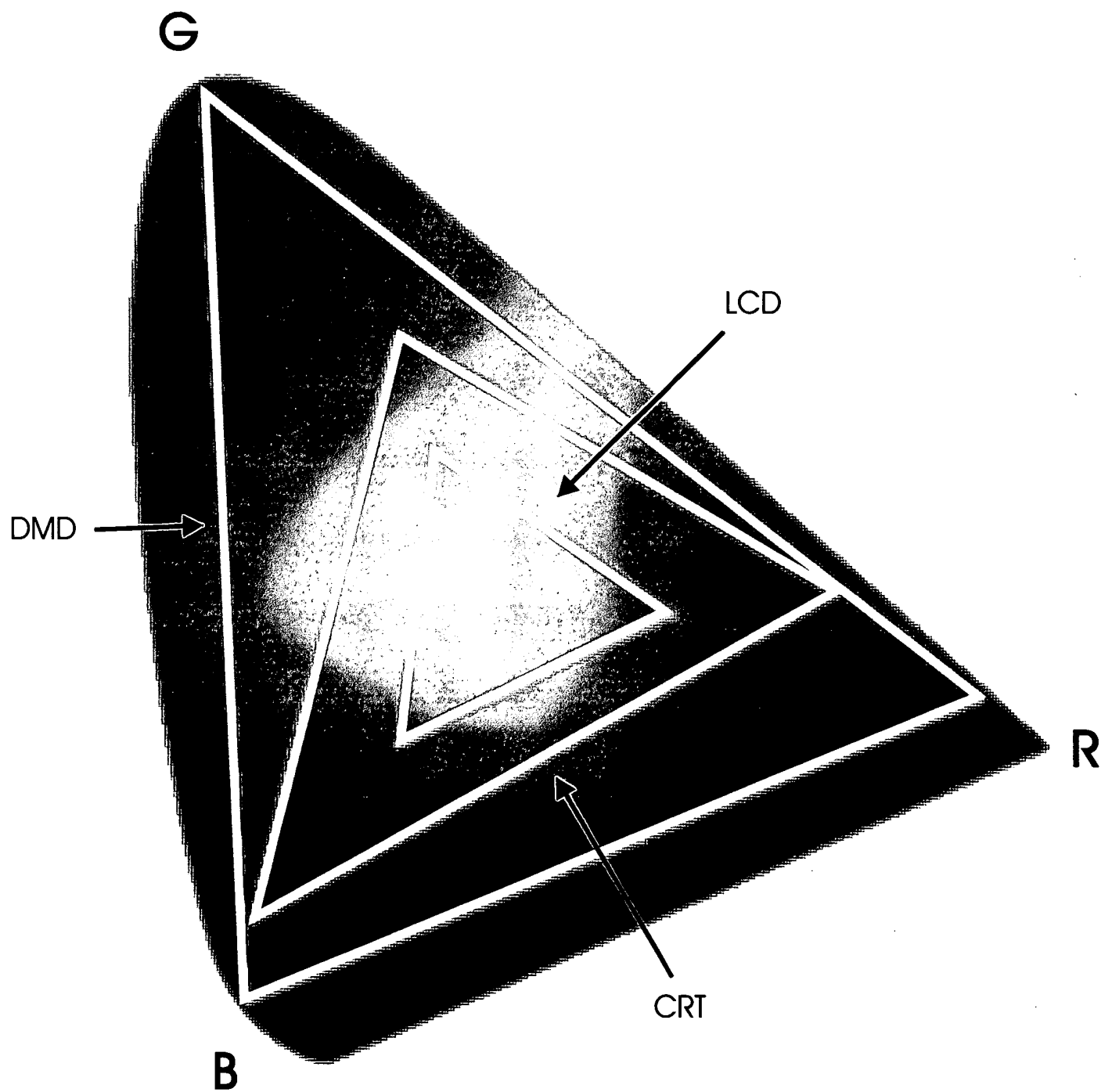


Fig. 37